

REMARKS

AMENDMENTS

Claims 1-3 are amended herein to clarify the structural and functional requirements for the claimed PARP homologs. No new matter has been introduced.

ELECTION/RESTRICTION

Applicants appreciate the examiner's reminder concerning the finality of the restriction requirement and the necessity for petition at this stage. A petition was, in fact, filed on August 1, 2003 in response to the holding of finality expressed in the office action of January 13, 2003. As of the present date, no response on this matter has been forthcoming from the Commissioner, and applicants respectfully request that the examiner make an inquiry into the status of this petition.

CLAIM OBJECTIONS

Under the present circumstances, where applicants have received no review on the finality of the examiner's restriction requirement, claim 1 is not amended as requested by the examiner.

CLAIM REJECTIONS UNDER 35 USC §112

As indicated above, claims 1-3 have been amended to clarify the structural and functional features present in the claimed functional equivalents. These claims now recite certain PARP proteins specifically and homologs thereof having at least 85%

equivalency, poly(ADP-ribose) synthesizing activity, a specified functional NAD⁺ binding domain, and no zinc finger motif as indicated. The functional equivalents now have significant functional homology, as well as structural homology, with the expressly recited PARP sequences.

The indefiniteness and written description rejections of claims 1-3 have been based on a lack of express functionality associated with the claimed functional equivalents. It is hoped that the present amendment to the claims will resolve the examiner's concerns on these points. To the extent that the enablement rejection of these claims, also, has been based on imprecision in denoting the proper functionality, applicants express the same hope with reference to the examiner's concerns in this regard.

The examiner further bases the enablement rejection on the perceived "minor structural limitations" recited in claim 1 with reference to the claimed molecules. Applicants assume this rejection to be made, again, with reference to the functional equivalents, as the other proteins are defined by sequence identification numbers. In the above-referenced amendment to claim 1, the claim is restructured to more accurately show the intended structural limitation applicability. In structural terms, the claimed functional equivalents must have at least 85% homology with the expressly recited sequences *and* must have a certain sequence section coding for a NAD⁺ binding domain and lack the common PARP zinc finger motif.

Structural homology of 85% at the amino acid level with functional equivalency is not uncommon for the skilled artisan to achieve in the present art. The additionally

recited structural requirements further narrow the possibilities for successful realization of the claimed equivalents. Accordingly, applicants respectfully submit that the breadth of the claims is commensurate with the enablement for one of ordinary skill in the art. In view of this, applicants hope that the examiner's concerns on this issue are fully satisfied, and request that all rejections based on 35 USC §112 be withdrawn.

Should the examiner have further concerns, specific suggestions as to resolving such are respectfully sought.

CONCLUSION

In view of the foregoing amendments and remarks, applicants consider that the rejections of record have been obviated and respectfully solicit passage of the application to issue.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,
KEIL & WEINKAUF

A handwritten signature in black ink, appearing to read 'David C. Liechty', with a long horizontal flourish extending to the right.

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